

CLAIMS

1 1. A sound-reducing component for use with a vehicle silencer on
2 an off-road vehicle comprising:

3 an adapter including a wall and an exhaust passage, the wall defining an
4 exhaust discharge chamber, the exhaust discharge chamber having an exhaust
5 port and a discharge opening, the exhaust port being operable to communicate
6 exhaust and sound to the atmosphere and the discharge opening being operable
7 to communicate exhaust and sound into the exhaust passage;

8 a U-joint having a first and a second end, the first end of the U-joint
9 being secured to the exhaust passage; and

10 an exhaust extension having an exhaust opening and an end opposite
11 the exhaust opening, the end of the exhaust extension being secured to the
12 second end of the U-joint.

1 2. The sound-reducing component of claim 1, wherein the exhaust
2 discharge chamber includes an open end.

1 3. The sound-reducing component of claim 2, wherein the area of
2 the exhaust port is smaller than the area of the open end of the exhaust
3 discharge chamber.

1 4. The sound-reducing component of claim 1, wherein the exhaust
2 discharge chamber has an axis and the exhaust port is oriented at an angle
3 relative to the axis of the exhaust discharge chamber.

1 5. The sound-reducing component of claim 5, wherein the exhaust
2 port is oriented at an angle between 0 and 90 degrees relative to the axis of the
3 exhaust discharge chamber.

1 6. The sound-reducing component of claim 1, further comprising a
2 connector for securing the first end of the U-joint to the exhaust passage.

1 7. The sound-reducing component of claim 1, further comprising a
2 connector for securing the second end of the U-joint to the end of the exhaust
3 extension.

1 8. The sound-reducing component of claim 1, further comprising a
2 sound deadening material.

1 9. The sound-reducing component of claim 1, further comprising a
2 heat-resistant material.

1 10. A sound-reducing component for use with a vehicle silencer on
2 an off-road vehicle comprising:

3 an off-road vehicle;
4 a silencer having an exhaust end and being mounted on the off-road
5 vehicle;
6 an adapter that is positionable on the exhaust end of the silencer, the
7 adapter including a wall and an exhaust passage, the wall defining an exhaust
8 discharge chamber, the exhaust discharge chamber having an exhaust port and
9 a discharge opening, the exhaust port being operable to communicate exhaust
10 and sound to the atmosphere and the discharge opening being operable to
11 communicate exhaust and sound into the exhaust passage;
12 a U-joint having first and second end, the first end of the U-joint being
13 secured to the exhaust passage; and
14 an exhaust extension having an exhaust opening and an end opposite
15 the exhaust opening, the end of the exhaust extension being secured to the
16 second end of the U-joint.

1 11. The sound-reducing component of claim 10, further comprising
2 a sound deadening material.

1 12. The sound-reducing component of claim 11, further comprising
2 a heat-resistant material.

1 13. The sound-reducing component of claim 10, wherein the
2 exhaust passage of the adapter extends substantially parallel to the silencer.

1 14. The sound-reducing component of claim 13, wherein the
2 exhaust extension extends substantially parallel to the exhaust passage.

1 15. The sound-reducing component of claim 10, wherein the
2 exhaust discharge chamber includes an open end, the open end being
3 positionable over the exhaust end of the silencer.

1 16. The sound-reducing component of claim 15 wherein the area of
2 the exhaust port is smaller than the area of the open end of the exhaust
3 discharge chamber.

1 17. The sound-reducing component of claim 10, wherein the
2 exhaust discharge chamber has an axis and the exhaust port is oriented at an
3 angle relative to the axis of the exhaust discharge chamber.

1 18. The sound-reducing component of claim 17, wherein the
2 exhaust port is oriented at an angle between 0 and 90 degrees relative to the
3 axis of the exhaust discharge chamber.

1 19 The sound-reducing component of claim 10, further comprising
2 a connector for securing the first end of the U-joint to the exhaust passage.

1 20. The sound-reducing component of claim 10, further comprising
2 a connector for securing the second end of the U-joint to the end of the exhaust
3 extension.

1 21. A sound-reducing component for use with a vehicle silencer on
2 an off-road vehicle comprising:
3 an off-road vehicle;
4 a silencer having an exhaust end and being mounted on the off-road
5 vehicle;
6 an adapter including a wall and an exhaust passage, the exhaust passage
7 having an end, the wall having an inner surface that defines an exhaust
8 discharge chamber, the exhaust discharge chamber having an open end, an
9 exhaust port and a discharge opening, the open end being positionable around
10 the exhaust end of the silencer, the exhaust port being operable to communicate
11 exhaust and sound to the atmosphere and the discharge opening being operable
12 to communicate exhaust and sound into the exhaust passage; and
13 an exhaust extension having an exhaust opening and an end opposite
14 the exhaust opening, the end opposite the exhaust opening being in
15 communication with the exhaust passage.

1 22. The sound-reducing component of claim 21 further comprising
2 a U-joint having first and second end; and

3 a first and a second connector, the first connector securing the first end
4 of the U-joint to the end exhaust passage, the second connector securing the
5 end of the exhaust extension to the second end of the U-joint

1 22. The sound-reducing component of claim 21 further comprising
2 a fastener positioned on the exhaust passage of the adapter, the fastener being
3 operable to secure the adapter to the off-road vehicle.

1 23. The sound-reducing component of claim 21 wherein the area of
2 the exhaust port is smaller than the area of the open end of the exhaust
3 discharge chamber.

1 24. The sound-reducing component of claim 23, wherein the
2 exhaust discharge chamber has an axis and the exhaust port is oriented at an
3 angle between 0 and 90 degrees relative to the axis of the exhaust discharge
4 chamber.

1 25. The sound-reducing component of claim 24, wherein the
2 exhaust passage of the adapter extends substantially parallel to the silencer and
3 the exhaust extension extends substantially parallel to the exhaust passage.

1 26. The sound-reducing component of claim 21, further comprising
2 a sound deadening material.

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- 1 27. The sound-reducing component of claim 21, further comprising
- 2 a heat-resistant material.